



US 20170086077A1

(19) **United States**(12) **Patent Application Publication**
TENG et al.(10) **Pub. No.: US 2017/0086077 A1**(43) **Pub. Date: Mar. 23, 2017**(54) **METHOD, APPARATUS AND SYSTEM****Publication Classification**(71) Applicant: **NOKIA SOLUTIONS AND NETWORKS OY**, Espoo (FI)(51) **Int. Cl.**
H04W 16/14 (2006.01)
H04W 28/08 (2006.01)
H04W 28/02 (2006.01)(72) Inventors: **Yong TENG**, Beijing (CN); **Kari Veikko HORNEMAN**, Oulu (FI); **Ling YU**, Kauniainen (FI)(52) **U.S. Cl.**
CPC **H04W 16/14** (2013.01); **H04W 28/0236** (2013.01); **H04W 28/08** (2013.01)(73) Assignee: **NOKIA SOLUTIONS AND NETWORKS OY**, Espoo (FI)(21) Appl. No.: **15/311,387**(57) **ABSTRACT**(22) PCT Filed: **May 16, 2014**(86) PCT No.: **PCT/EP2014/060098**

§ 371 (c)(1),

(2) Date: **Nov. 15, 2016**

A method includes determining, for a first network, first activity information for shared usage of a first portion of a spectrum allocated to the first network with at least one second network and causing the activity information to be sent to at least one base station of said second network.

